AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for providing dynamic verification and alignment of production tool loadports in an automated material handling system environment, comprising:

transmitting collimated light beams from a production tool loadport fixture to an overhead transport vehicle, said overhead transport vehicle mounted on an overhead transport rail;

reading values received from said collimated light beams by a detector;

calculating an offset value as a result of said reading values;

adding an identification for said production tool to a tool map;

adding said offset value for said production tool to said tool map; and

compensating for said offset values without taking said production tool offline by aligning said overhead transport vehicle with said production tool loadport fixture in accordance with said offset value.

2. (original) The method of claim 1, wherein said tool map is stored internal to said overhead transport vehicle.

3. (currently amended) The method of claim 1, wherein said collimated light beams are transmitted by a laser.

4. (original) The method of claim 1, wherein said detector is mounted on said overhead transport vehicle.

5. (withdrawn) The method of claim 1, wherein said detector is mounted on said production tool loadport fixture; wherein further said overhead transport vehicle includes a reflective device operable for reflecting said light beams from said overhead transport vehicle to said detector.

6. (withdrawn) A method for providing dynamic verification and alignment of production tool loadports in an automated material handling system environment, comprising:

transmitting light beams from an overhead transport vehicle to a production tool loadport fixture, said overhead transport vehicle mounted on an overhead transport rail;

reading values received from said light beams by a detector;

calculating an offset value as a result of said reading values;

transmitting said offset value to said overhead transport vehicle;

compensating for said offset values without taking said production tool offline by aligning said overhead transport vehicle with said production tool loadport fixture in accordance with said offset value;

adding an identification for said production tool to a tool map; and

adding said offset value for said production tool to said tool map.

7. (withdrawn) The method of claim 6, wherein said offset value is transmitted to said overhead transport vehicle via a wireless modem.

8. (withdrawn) The method of claim 1, wherein said detector is mounted on said overhead transport vehicle; wherein further said production tool loadport fixture includes a reflective device operable for reflecting said light beams from said production tool loadport fixture to said detector.

9. (withdrawn) The method of claim 1, wherein said detector is mounted on said production tool loadport fixture.

10. (original) A system for providing dynamic verification and alignment of production tool loadports in an automated material handling system environment, said system comprising:

an overhead transport vehicle transportable via an overhead transport rail;

a detector mounted on said overhead transport vehicle;

a production tool comprising a loadport, said production tool engaged with said overhead transport vehicle;

a loadport fixture mounted on said loadport, said loadport fixture including:

a plurality of collimated light sources;

a communications means; and

control logic;

wherein said plurality of collimated light sources transmit collimated light beams from said loadport fixture to said overhead transport vehicle; and

wherein further said detector reads values received from said collimated light beams and calculates an offset value operable for compensating for said offset value without taking said production tool offline.

11. (original) The system of claim 10, wherein said communications means is a wireless modem.

12. (currently amended) The system of claim ~~1~~10, further comprising a tool map associated with said overhead transport vehicle including delivery points for said overhead transport vehicle, said tool map storing:

a distance between production tools;

production tool identifications; and

production tool offset data.

13. (new) The system of claim 10, wherein said collimated light sources comprise lasers.

14. (new) The system of claim 12, wherein said tool map is stored internal to said overhead transport vehicle.